



Uniformed Services University

of the Health Sciences
4301 Jones Bridge Road,
Bethesda, MD 20814-4799
<http://www.usuhs.mil>

Release No. 05-09-0007

Sept. 23, 2005

Contact: Office of University Affairs

Voice: 301-295-9702 **Fax:** 301-295-3757

Email: anicholson@usuhs.mil

Media Advisory

USU researchers win inaugural award

BETHESDA, Md. – Dr. Katharine Bossart, Department of Microbiology, at the Uniformed Services University of the Health Sciences (USU), led a Commonwealth Scientific and Industrial Research Organization Team (CSIRO) who were awarded the inaugural City of Greater Geelong/BioGeelong (Australia) Researcher of the Year Award last month for their work in controlling two killer viruses.

The CSIRO team was part of an international collaboration led by Christopher Broder, Ph.D., associate professor, Department of Microbiology, USU. The collaboration identified a human cell receptor for both the Hendra and Nipah viruses.

Dr. Broder led the team of researchers and investigators who demonstrated that a cell surface protein called Ephrin-B2 is a functional receptor for both the Hendra and Nipah viruses.

Ephrin-B2 is highly conserved in animals and this finding sheds light on how these viruses can infest such a wide range of hosts. These viruses are recognized as potential bio-terrorism agents and the discovery of the Ephrin-B2 cell receptor will assist in therapeutic and vaccine development, Dr. Broder explained.

The receptor is like a virus-specific gate on human and animal cells. Without it, the virus can't enter the cell and start replicating within. There are currently no vaccines or treatments

available to combat infection by these potentially lethal viruses. Identifying the cell receptor is an important breakthrough because it will aid efforts to develop effective therapies against these viruses.

Dr. Bossart and her team won the \$10,000 overall prize and another \$5,000 as the Bendigo Bank Biomedical Award winner. Dr. Bossart said the prize money would allow the researchers to learn more about the viruses and facilitate the development of vaccines and treatments.

-end-